

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1 (currently amended):     ~~An apparatus~~ A MEMS array comprising:  
    a substrate having formed thereon a plurality of movable mirrors; and  
    a cover attached to the substrate over the mirrors, wherein the cover is  
formed into a covering lens ~~disposed over the plurality of mirrors for covering~~  
~~and~~ adjusting an optical field of at least one of the plurality of mirrors.

Claim 2 (currently amended):     ~~The apparatus~~ MEMS array of claim 1, wherein  
the covering lens has a positive focal length.

Claim 3 (currently amended):     ~~The apparatus~~ MEMS array of claim 1, wherein  
the covering lens comprises:

    a first surface facing toward the plurality of mirrors; and  
    a second surface facing away from the plurality of mirrors, wherein the  
first surface is substantially flat and the second surface is substantially convex.

Claim 4 (withdrawn):     ~~The apparatus~~ MEMS array of claim 1, wherein the  
covering lens comprises:

    a first surface facing toward the plurality of mirrors; and  
    a second surface facing away from the plurality of mirrors, wherein the  
first surface is substantially convex and the second surface is substantially flat.

Claim 5 (withdrawn):     ~~The apparatus~~ MEMS array of claim 1, wherein the  
covering lens comprises:

    a first surface facing toward the plurality of mirrors; and



a second surface facing away from the plurality of mirrors, wherein the first surface is substantially concave and the second surface is substantially convex with a smaller radius than the concave surface.

Claim 6 (withdrawn):      The ~~apparatus~~ MEMS array of claim 1, wherein the plurality of mirrors are micro-machined mirrors.

Claim 7 (currently amended)      An optical switching system comprising:  
a first ~~mirror apparatus~~ MEMS array having a first plurality of movable mirrors and a first cover; and  
a second ~~mirror apparatus~~ MEMS array having a second plurality of movable mirrors and a second cover, wherein the first ~~mirror apparatus~~ MEMS array is operably coupled to reflect an optical signal toward a selected mirror of the second ~~mirror apparatus~~ MEMS array, and wherein at least one of the first ~~mirror apparatus~~ cover and the second ~~mirror apparatus~~ cover ~~includes an integral~~ is formed into a covering lens for covering and adjusting an optical field of at least one of its ~~plurality of~~ underlying mirrors.

Claim 8 (currently amended)      The optical switching system of claim 7, wherein the ~~integral~~ covering lens has a positive focal length.

Claim 9 (currently amended):      The optical switching system of claim 7, wherein the ~~integral~~ covering lens comprises:

a first surface facing toward the plurality of mirrors; and  
a second surface facing away from the plurality of mirrors, wherein the first surface is substantially flat and the second surface is substantially convex.

Claim 10 (withdrawn):      The optical switching system of claim 7, wherein the covering lens comprises:

a first surface facing toward the plurality of mirrors; and



a second surface facing away from the plurality of mirrors, wherein the first surface is substantially convex and the second surface is substantially flat.

Claim 11 (withdrawn): The optical switching system of claim 7, wherein the covering lens comprises:

- a first surface facing toward the plurality of mirrors; and
- a second surface facing away from the plurality of mirrors, wherein the first surface is substantially concave and the second surface is substantially convex with a smaller radius than the concave surface.

Claim 12 (withdrawn): The optical switching system of claim 7, further comprising:

- a plurality of input lenses operably coupled to direct a plurality of optical signals from a plurality of input fibers to the first mirror apparatus.

Claim 13 (withdrawn): The optical switching system of claim 7, further comprising:

- a plurality of output lenses operably coupled to receive a plurality of optical signals from the second mirror apparatus and direct the plurality of optical signals to a plurality of output fibers.

Claim 14 (withdrawn): The optical switching system of claim 7, further comprising:

- control logic operably coupled to determine a desired position for each movable mirror and to send control signals to the first mirror apparatus and the second mirror apparatus for setting each movable mirror to its desired position.

Claim 15 (withdrawn): The optical switching system of claim 7, wherein the movable mirrors are micro-machined mirrors.



Claim 16 (canceled).